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Atty. Dkt. No. 040447-0276

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kota IWAMOTO

Title: IMAGE SIMILARITY CALCULATION SYSTEM, IMAGE SEARCH
SYSTEM, IMAGE SIMILARITY CALCULATION METHOD, AND
IMAGE SIMILARITY CALCULATION PROGRAM

Appl. No.: 10/567,561

International 03/02/2005
Filing Date:
371(c) Date: 02/08/2006

Examiner: Unassigned

Art Unit: 2624

Confirmation 6623
Number:

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the mailing date of the foreign search report.

RELEVANCE OF EACH DOCUMENT

The documents listed on the attached PTO/SB/08 were cited as being relevant during the prosecution of the corresponding Japanese application. A partial English translation of the Japanese Office Action of May 9, 2008, follows:

Note (for cited literature, see List of Cited Literature)

- Claims 1 through 4, 8 through 17 and 24
- Cited Literature 1 through 6
- Remarks

(Claim 1)

Cited Literature 1 describes a similar scene detection device (corresponding to the “image similarity computation system” of the present invention) that detects scenes A2, A3, which are similar to a scene A1, which the user wants to see, comprising an arrangement (corresponding to the “feature extraction unit” of the present invention) in which the image is subjected to averaging compression and the luminance levels of the top (L1), middle (L2) and bottom (L3) portions of the image are determined as a1, a2 and a3, wherein a1, a2 and a3 are used to determine correlation, and wherein, assuming the fact that subtitles (corresponding to the “manipulation” of the present invention) often appear at the bottom of the image, an arrangement is provided (corresponding to the “image similarity computation unit” of the present invention) whereby, in cases where correlation is found between the top part L1 and middle part L2 but not the bottom part L3, the probability of this being due to the presence/absence of subtitles is considered to be high (see Paragraphs (0023) through (0025) and (0037) of the publication).

Cited Literature 2 describes an arrangement wherein first, the character part (corresponding to the “manipulation” of the present invention) is detected from an image, and an overall image analysis (shake compensation) is carried out without using the image analysis results for that region (see Paragraph (0068) of the publication). The invention described in Cited Literature 1 and the invention described in Cited Literature 2 both belong to the same technical field of comparing and processing a plurality of images.

Furthermore, it is publicly known that subtitles tend to appear at a specific position on the screen (if necessary, see Paragraph (0079) of Cited Literature 2, and Paragraph (0031) and (Figure 3) of Japanese Unexamined Patent Application Publication H08-098133).

(Claim 2)

Cited Literature 3 describes an arrangement whereby the region of subtitles (corresponding to the “manipulation” of the present invention) is excluded from processing in advance (see (Claim 14), (Claim 11) and (Claim 8) of the publication).

(Claims 3 and 4)

Cited Literature 2 describes an arrangement whereby features (motion vectors) are extracted from detection regions in an image and mean values for the entire image are determined based on features of the regions excluding the region where characters were detected.

(Claim 8)

Cited Literature 4 describes an arrangement of separating regions based on a usage template for a read image (see especially Paragraph (0034) of the publication).

(Claim 9)

Cited Literature 5 describes an image analysis device that splits images into rectangles of the same size (see especially Paragraph (0076) of the publication).

(Claim 10)

Cited Literature 6 describes an image recognition system wherein subregions are defined so as to partially overlap (see Paragraph (0020) of the publication).

(Claim 11)

Cited Literature 1 describes the point of not using video data of the entire screen but only using a portion thereof (see Paragraph (0023) of the publication).

(Claims 12 and 13)

Cited Literature 4 describes an arrangement of finding the average color for each subregion of a read image and determining the color difference from a key image as a Euclidian distance in RGB color space (see Paragraphs (0034) and (0035) of the publication)..

(Claim 14)

The invention described in Cited Literature 1 relates to the presence or absence of “subtitles” (see Paragraph (0024) of the publication).

(Claims 15 and 16)

The invention described in Cited Literature 1 relates to image searching (see especially Paragraph (0037)).

(Claims 17 and 24)

No remarkable difficulty is found on the basis of the invention described in Cited Literature 1 and the invention described in Cited Literature 2 (same as in the remarks relating to Claim 1 above).

List of Cited Literature

1. Japanese Unexamined Patent Application Publication 2002-044573
2. Japanese Unexamined Patent Application Publication H07-123364
3. Japanese Unexamined Patent Application Publication 2003-179884
4. Japanese Unexamined Patent Application Publication 2002-304415
5. Japanese Unexamined Patent Application Publication 2004-005484

6. Japanese Unexamined Patent Application Publication
2003-323622

Record of Prior Art Literature Search Results

- Fields searched IPC G06T7/00–7/60
- Prior art literature Japanese Unexamined Patent
Application Publication H08-098133

Japanese Unexamined Patent Application Publication 2003-
333424

This record of prior art literature search results does not
constitute a reason for rejection.

Document D1 is a U.S. counterpart of Document D5.

Document D2 is a U.S. counterpart of Document D7.

Documents D3 and D4 are U.S. counterparts of Document D12.

Any document listed on the attached PTO/SB/08 was cited as being relevant during the prosecution of the corresponding Japanese application. A copy of the Japanese Search Report is attached setting forth the portion of each document considered relevant by the examiner. An English-language counterpart of the foreign-language documents has not been provided. The absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 CFR §1.98 and MPEP§609).

Applicant respectfully requests that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

Applicant's statements regarding the Japanese office action are based on a translation that applicant's representative obtained. These statements should in no way be considered as an agreement by applicants, with or an admission of, what is asserted in the Japanese office action.

STATEMENT

The undersigned hereby states in accordance with 37 CFR §1.704(d) that each item of information contained in the information disclosure statement was first cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR §1.56(c) more than thirty days prior to the filing of the information disclosure statement.

The undersigned hereby states in accordance with 37 CFR §1.97(e)(1) that each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to filing of this Statement.

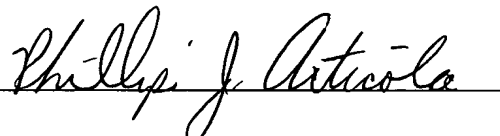
Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

Date: June 6, 2008

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